

# Notice of Allowability

Application No.

09/358,206

Examiner

Guillermo Perez

Applicant(s)

CARROLL, JOHN B.

Art Unit

2834

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment RCE filed on March 21, 2003.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☒ The drawings filed on 02 August 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |  |   |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)  | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____               | 6 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | 9 <input type="checkbox"/> Other  |

**DETAILED ACTION**

***Allowable Subject Matter***

Claims 1-21 are allowed.

The following is an examiner's statement of reasons for allowance: referring to claims 1-19, in a pneumatically driven electric power generator comprising:

a single cylinder having a first end correctable through a single inlet footpath to an air supply passage containing air at a positive pressure, a second end of the cylinder being open;

a cylinder extension at least one of formed integrally with and attached to the single cylinder, the cylinder extension having an inner surface having a transverse dimension greater than a transverse dimension of the single cylinder, the cylinder extension including a threaded portion adjacent one end thereof;

an end closure threaded to an end of the cylinder extension;

a single piston having a magnetic moment associated therewith, the piston being positioned in a first location in which at least a first portion of the piston is disposed within the cylinder and in a second location in which the first option of the single piston is outside of the single cylinder so that clearance is provided between the single cylinder so that air pay exhaust from the single cylinder;

sealing means disposed on at least one of an outer surface of the first portion of the single piston and an inner surface of the single cylinder to prevent loss of air between the single piston and the single cylinder and permit air pressure in the single

cylinder to increase when the first portion of the single piston is disposed within the single cylinder;

a single biasing means caged between a ledge portion adjacent one end of the single piston and an inner surface of the end closure for moving the single piston from the second position toward the first position so that after the single cylinder has substantially exhausted, the single piston moves to the first position, whereby the single piston oscillates, moving back and forth between the first position and the second position, driven alternately by air supplied through such air supply passage to the single cylinder and by the biasing means; and

at least one electric coil placed to enclose changing magnetic flux caused by the magnetic moment associated with the piston whereby an emf is generated in the electric coil, so that an external circuit connected to the electric coil receives electric power from the electric coil;

the prior art's references of record do not disclose the specific single cylinder threaded configuration and the piston capability of displacing outside the single cylinder, as described in the claims.

Referring to claims 20-21, in a pneumatically driven electric power generator comprising:

a first cylinder having a first end correctable through a first inlet flow path to an air supply passage, a second end of the first cylinder being open;

a first cylinder extension at least one of formed integrally with and attached to the first cylinder, the first cylinder extension having an inner surface having a transverse dimension greater than a transverse dimension of the first cylinder;

a second cylinder having a first end connectable through a second inlet flow path to the air supply passage, a second end of the second cylinder being open;

a second cylinder extension at least one of formed integrally with and attached to the second cylinder, the second cylinder extension having an inner surface having a transverse dimension greater than a transverse dimension of the second cylinder;

means for connecting the first cylinder extension and the second cylinder extension;

a common exhaust for the first cylinder and the second cylinder;

a single piston having a magnetic moment associated therewith, the single piston having a first end portion and a second end portion, the single piston being positioned in a first location in which the first end portion of the single piston is disposed within the first cylinder and the second end portion of the single piston is disposed outside of the second cylinder, the single piston further being positioned in a second location in which the second end portion of the single piston is disposed within the second cylinder and the first portion of the single piston is outside of the first cylinder;

so that when the single piston is disposed in the first position, air pressure received in the first cylinder through the first inlet flow path drives the single piston toward the second position, whereupon the first cylinder exhausts, and when the single piston is disposed in the second position, air pressure received in the second cylinder

through the second inlet flow path drives the single piston toward the first position, whereupon the second cylinder exhausts, so that the single piston oscillates; and

at least one electric coil placed to enclose changing magnetic flux caused by the magnetic moment associated with the piston whereby an emf is generated in the electric coil, so that an external circuit connected to the electric coil receives electric power from the electric coil;

the prior art's references of record do not disclose the first and second cylinder configuration together with the connecting means and the common muffler described in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Perez whose telephone number is (703) 306-5443. The examiner can normally be reached on Monday through Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308 1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

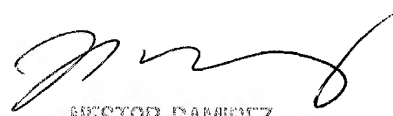
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305 3432 for regular communications and (703) 305 3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

Guillermo Perez  
Wednesday, April 16, 2003



NESTOR RAMIREZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800